

Canon

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Flowchart and Reference Guides

The following guides are available. Refer to them as necessary according to the flowchart below.



In this guide, the Basic Camera User Guide is called the Basic Guide, and the Advanced Camera User Guide is called the Advanced Guide.

In this guide, explanations are given using illustrations for the PowerShot A640.

The Components Guide

Front View



- 1 Wrist Strap Mount
- 2 Speaker
- ③ AF-assist Beam (Advanced Guide p. 21)
- (4) Red-Eye Reduction Lamp (p. 16)
- (5) Self-Timer Lamp (p. 18)
- (6) Viewfinder Window (Advanced Guide p. 16)
- 7 Flash (p. 15)
- (8) Ring (Advanced Guide p. 121)
- (9) Ring Release Button (Advanced Guide p. 121)
- 10 Lens
- 1 Microphone (Advanced Guide pp. 39, 87)

Back View



- ① LCD Monitor (p. 7, Advanced Guide p. 12)
- ② Viewfinder (Advanced Guide p. 16)
- ③ A/V OUT (Audio/Video output) Terminal (Advanced Guide p. 97)
- ④ DIGITAL Terminal (p. 28)
- **5** Terminal Cover
- 6 DC IN Terminal (Power input) (Advanced Guide p. 119)
- ⑦ Memory Card Slot / Battery Cover (p. 5)
- 8 Memory Card Slot / Battery Cover Lock (p. 5)
- 9 Tripod Socket

Controls



- 1 Indicators (p. 4)
- 2 Power Lamp
- 3 Power Button (p. 9)
- ④ Zoom Lever (p. 14, Advanced Guide p. 78) Shooting: IIII (Wide Angle)/ [Ⅰ] (Telephoto) Playback: IIII (Index)/Q (Magnify)
- (5) Shutter Button (p. 10)
- 6 Shooting Mode Dial (pp. 9, 11)
- 7 Mode Switch (pp. 9, 20)
- ⑧ 凸 ๗ (Print/Share) Button (p. 23)
- (9) MENU Button (p. 22, Advanced Guide p. 19)
- 10 FUNC./SET (Function/Set) Button (p. 21, Advanced Guide p. 18)
- (1) DISP. (Display) Button (Advanced Guide p. 12)
- ② [Exposure)/☆ (Single Image Erase) Button (p. 20, Advanced Guide p. 57)
- 13 ≰ (Flash)/ ▲ (Jump)/ ▲ Button (p. 15, Advanced Guide p. 80)
- Button
- 15 ♥(Macro)/MF (Manual Focus)/ Button (p. 17, Advanced Guide p. 51)
- 16 ← Button

Indicators

The camera indicators will light or blink under the following conditions.



Never do the following while the green indicator blinks.

These actions may corrupt image data.

- Shake or jolt the camera
- Shut off the power, or open the memory card slot/battery cover

Upper Indicator

Green:	Ready to shoot
Blinking Green:	Image recording/reading/erasing/transferring (when connected to a computer)
Orange:	Ready to shoot (flash on)
Blinking Orange:	Ready to shoot (camera shake warning), charging flash

Lower Indicator

Yellow:	Macro mode/Manual focus mode/AF lock mode
Blinking Yellow:	Focusing difficulty (camera beeps once)

1. Installing the batteries.

- 1. Slide the memory card slot/battery cover lock in the direction of the arrow (①) and open the cover (②).
- 2. Insert the 4 supplied AA-size alkaline batteries, or separately sold AA-size NiMH batteries.





2. Inserting the memory card.

- 1. Insert the memory card until it clicks into place.
- Hold down the memory card slot/battery cover (①), then slide it in the direction of the arrow until it clicks into place (②).



Ensure that the memory card is correctly oriented before inserting it in the camera. It may damage the camera, or the camera may not recognize the card, if it is inserted incorrectly.



See the Advanced Guide: Handling the Memory Card (p. 114). See the Advanced Guide: Formatting Memory Cards (p. 26).

To Remove the Memory Card

Push the memory card with your finger until the memory card clicks and then release it.



You can use SD* memory cards, SDHC memory cards and MultiMediaCards with this camera. These cards are collectively called memory cards in this guide.

* SD stands for Secure Digital, a copyright protection system.



First Time Settings

Opening the LCD Monitor

The LCD monitor can be used to check an image during shooting, to play back recorded images or to adjust menu settings. It can be opened to the following range of positions.

1. Opened right to left 180 degrees.

2. Tilted forward 180 degrees toward the lens or backward 90 degrees.

When tilted forward 180 degrees toward the lens, the image shown on the LCD monitor is automatically flipped and reversed so that it

appears correctly from in front of the lens.

This reverse display function can be turned off.

3. Close the LCD monitor with the LCD monitor facing out.

When the LCD monitor clicks into place against the camera body, the image will return to its original, nonreversed orientation.

See the Advanced Guide: Using the LCD Monitor (p. 12).





See the Advanced Guide: Rec. Menu (p. 20).

O









- **1.** Press the power button (①).
- **3.** Confirm that the correct time is displayed and press the FUNC./SET button (③).

The date and time can also be set in the Set up menu (p. 22).

- A rechargeable lithium battery is built into the camera to save such settings as the date/time. This battery charges when the main batteries are in the camera. When you purchase the camera, place the main batteries in it for approximately four hours or use AC Adapter Kit ACK600 (sold separately) to charge the lithium battery. It will charge even if the camera is turned off.
 - The date/time settings may be lost after approximately three weeks if you remove the main batteries. Reset the date/time settings if this occurs.

Setting the Display Language

- **1.** Set the mode switch to **>** (playback).
- **2.** Hold down the FUNC./SET button and press the MENU button.

3. Use the ←, →, ← or + button to select a language and press the FUNC./SET button.

The display language can also be set in the Set up menu (p. 22).

Shooting

1. Press the power button.

The start-up sound will play and the start-up image will display on the LCD monitor.

- Pressing the power button again turns the power off.
- Pressing the power button while pressing and holding the **DISP**. button will turn on the mute setting which will mute all sounds except for warning sounds.



See the Advanced Guide: Power Saving Function (p. 17).
 See the Advanced Guide: Set up Menu (p. 22).
 See the Advanced Guide: Mv Camera Menu (p. 24).

- 2. Set the mode switch to (shooting) (1).
- **3.** Set the shooting mode dial to (2).

4. Aim the camera at the subject.



5. Focus and shoot.

1. Press the shutter button halfway to focus.

When the camera focuses, the camera beeps twice and the indicator lights green (orange when using the flash). Also, the AF frame appears in green on the LCD monitor at the point where the camera is focused.

2. Press the shutter button fully to shoot.

The shutter sound will play and the image will record. The indicator will blink green while the image is recorded to the memory card.





- → See Selecting a Shooting Mode (p. 11).
- → See Indicators (p. 4).
- → See the Advanced Guide: Selecting an AF Frame (p. 47).

See the Advanced Guide for the various shooting methods available.

Reviewing an Image Right After Shooting

After a shot is taken, the image appears in the LCD monitor for approximately 2 seconds.

You can continue to display images regardless of the review duration setting with the following procedures.

- · Keeping the shutter button pressed after a shot.
- · Pressing the FUNC./SET or DISP. button while the image is displayed in the LCD monitor.

To stop displaying the image, press the shutter button halfway.



See the Advanced Guide: Review (p. 21). See Erasing (p. 20).

Selecting a Shooting Mode

1. Set the shooting mode dial to the desired mode (①).

In the SCN and $\stackrel{\bullet}{m}$ modes, use the \blacklozenge or \blacklozenge button (②) to select a shooting mode.



Shooting Modes

Auto	AUTO The camera automatically selects settings.		
lmage zone	When a shooting mode appropriate for the shooting conditions is selected, the camera automatically adjusts settings for optimal shooting.		
	Portrait Blurs the background and makes a person stand out.	Contain both near and far subjects.	
	Night scene Allows you to capture human subje backdrop of an evening sky or night is directed at the person and the sh slow, so both the person and the ba beautifully shot.	acts against the t scene. The flash nutter speed is ackground can be	

SCN (Special Scene)

You can shoot with the most appropriate settings for the scene.

Night Snapshot

Allows you to take snapshots of people against



twilight or night backgrounds by reducing the effects of camera shake even without using a tripod. Kids&Pets Allows you to capture subjects that move around,



such as children and pets, without missing photo opportunities.

Image

zone

the subject's true color when shooting under fluorescent or tungsten lighting.

Shoots trees and leaves such as new growth, autumn leave



autumn leaves or blossoms - in vivid colors.

📽 Snow

Revents

camera shake

and maintains

Shoots without a blue tinge and without making people appear



dark against a snowy background.

Beach Shoots without making people appear dark near water or sand



where reflected sunlight is strong.

Fireworks

Captures fireworks in the sky sharply and at optimal exposure.



Appropriate for shooting images with Waterproof Case WP-DC8



(sold separately). This mode uses an optimal white balance setting to reduce bluish tones and record images with a natural hue.



- The shutter speed is slow in S or mode. Always use a tripod to avoid camera shake.
 - In 🛃, 😭, 🕍, 🚺, 🔊 or 🔊 mode, the ISO speed may increase and cause noise in the image depending on the scene being shot.
 - In R mode, shoot with the subject more than 1 m (3.3 ft.) away from the front of the lens.
- To shoot underwater, install the camera in Waterproof Case WP-DC8 (sold separately).
 - We recommend you use Waterproof Case WP-DC8 (sold separately) for shooting at ski resorts or beaches.

Using the Zoom

1. Press the zoom lever toward [4] or III.

The zoom can be adjusted from 35 mm - 140 mm (focal length) in 35mm film equivalent terms.





Telephoto: Zooms in on the subject.
 Wide Angle: Zooms out from the subject.

Using the Flash

1. Press the **4** button to cycle through flash settings.



Each time you press the **\$** button, the flash settings will change. With the red-eye reduction function on:

$4^{A} \odot \rightarrow 4 \odot \rightarrow \odot$

With the red-eye reduction function off:

\$ ^ →	4	→	٢
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\$ ^ ©	Auto with red-eye reduction	The flash fires automatically and the red-eye reduction lamp lights each time.
\$ ^	Auto	The flash fires automatically.
4 💿	Flash on with red- eye reduction	The red-eye reduction lamp lights and the flash always fires.
4	Flash on	The flash always fires.
٢	Flash off	The flash will not fire.

Red-eye reduction: This feature reduces the effect of light reflecting back from the eyes and making them appear red (p. 16).

5 or 5 [●] cannot be set in AUTO mode.

See the Advanced Guide: Functions Available in Each Shooting Mode (p. 143). → See Selecting a Shooting Mode (p. 11).



You are recommended to shoot with the camera attached to a tripod or other device if the camera shake warning icon 🛄 appears.



When [Slow Synchro] is set to [On], camera shake may become a factor. Use of a tripod is recommended.

Slow synchro shooting and configuration is available in the \square , **P** and **Av** modes.

See Menus and Settings (p. 22).

chance that only the background will appear dark when a person is shot against a twilight background or night scene, or when an interior shot is taken.

* Default setting.

* Default setting.

The flash timing is adjusted to slow shutter speeds. This reduces the

Setting the Slow Synchro Function



You can set whether the camera automatically performs red-eye reduction when the flash fires.

Setting the Red-Eye Reduction Function

See Menus and Settings (p. 22).







Shooting Close-ups (Macro)

1. Press the 🖏 button.

To cancel the macro mode, press the \clubsuit button to turn off the \boxdot or \fbox display.



	Use this mode to shoot close-ups of flowers or small items.
Macro	 Image Area at Minimum Shooting Distance from End of Lens to Subject: Maximum wide angle setting: 22 x 16 mm (0.87 x 0.63 in.) Minimum shooting distance: 1 cm (0.39 in.) Maximum telephoto setting: 76 x 57 mm (3.0 x 2.2 in.) Minimum shooting distance: 25 cm (9.8 in.)

- Use the LCD monitor to compose close-ups in macro mode since images composed with the viewfinder may be off-center.
 - Check the range of the flash when using it in macro mode (*Advanced Guide* p. 127).

This setting cannot be set in some shooting modes.



Using the Self-Timer

1. FUNC. Menu ► ■* (Drive Mode) ► 🕅//.

See Menus and Settings (p. 21).

- * Default setting.
- When the shutter button is pressed fully, the self-timer lamp will blink. When using redeye reduction, the self-timer lamp will blink and then stay lit for the last 2 seconds.



To cancel the self-timer, press the **FUNC**./SET button and use the \blacklozenge or \blacklozenge button to select \square .





- *2 Default setting.
- *3 Default setting is 3 shots.

See the Advanced Guide: Functions Available in Each Shooting Mode (p. 143).

→ See Selecting a Shooting Mode (p. 11).

See the Advanced Guide: My Camera Menu (p. 24).

■ Changing the Delay Time and Number of Shots (🕲)

See Menus and Settings (p. 21).

- 2. Press the MENU button.
- 3. Select [Delay]/[Shots] using the ★ or ★ button and change the settings using the ← or → button.





If the [Shots] option is set to 2 or more shots, the following occurs.

- The exposure and white balance are locked at the settings selected for the first shot.
- If the flash is used, the interval between shots lengthens because the flash must charge.
- The interval between shots may lengthen when the built-in memory of the camera fills.
- Shooting will automatically cease if the memory card becomes full.

Playback

1. Set the mode switch to 🕨 (playback) (1).

The last image that was played back appears. If additional images were shot after viewing images in playback mode, the last image that was shot will appear instead. If the memory card has been switched, or the images on the memory card have been edited with a computer, the newest image on the memory card appears.



2. Use the ← or → button to display the image you wish to view (②).

Use the \blacklozenge button to move to the previous image and the \blacklozenge button to move the next image.

Holding the button down advances the images more rapidly, but shows them less clearly.

See the Advanced Guide for the various playback methods available.

Erasing

 In the playback mode, use the ← or → button to select an image to erase (①) and press the ☆ button (②).



2. Confirm that [Erase] is selected and press the FUNC./SET button (③).

To exit instead of erasing, select [Cancel].



Please note that erased images cannot be recovered. Exercise adequate caution before erasing an image.

See the Advanced Guide: Erasing All Images (p. 90).

Menus and Settings

Settings for the shooting, playback or print modes or such camera settings as the date/time and sounds are set using the FUNC., Rec., Play, Print, Set up or My Camera menu.

FUNC. Menu

This menu sets many of the common shooting functions.



- Set the mode switch to
 (shooting).
- 2 Press the FUNC./SET button.

③ Use the ★ or ★ button to select a menu item.

· Some items may not be selectable in some shooting modes.

④ Use the ◆ or ◆ button to select an option for the menu item.

- You can select further options with the **MENU** button for some options.
- After selecting an option, you can press the shutter button to shoot immediately. After shooting, this menu will appear again, allowing you to adjust the settings easily.
- In the FUNC./SET button.

Rec., Play, Print, Set up and My Camera Menus

Convenient settings for shooting, playback or printing can be set with these menus.



- ① Press the MENU button.
- - You can also use the zoom lever to switch between menus.
- ③ Use the ♠ or ♦ button to select a menu item.
 - Some items may not be selectable in some shooting modes.
- ④ Use the ← or → button to select an option.
 - Menu items followed by an ellipsis (...) can only be set after pressing the FUNC./SET button to display the next menu.
 Press the FUNC./SET button again to confirm the setting.
- **⑤** Press the MENU button.

Printing

Connect the camera to a direct print compatible printer^{*1} with a cable and simply press the $\Box \omega$ button on the camera.

1. Connect the camera to a direct print compatible printer and turn on the printer's power.



- *1 Since this camera uses a standard protocol (PictBridge), you can use it with other PictBridge-compliant printers in addition to Canon-brand printers.
- *2 You can also use card photo printers such as the CP-10/CP-100/CP-200/CP-300.

2. Turn on the power in playback mode and confirm that ☑, ☑ or ☑ is displayed in the upper left of the LCD monitor (①).

- The $\square \sim$ button will light blue.
- The displayed icon will vary according to the printer model.
- The 🔛 icon will display for movies.

Select an image to print using the ← or → button (2) and press the D_M button (3).

The $\square \sim$ button will blink blue and printing will start.





See the Advanced Guide: Setting the DPOF Print Settings (p. 91).

- \rightarrow See the Direct Print User Guide.
- ➔ See the user guide for your printer.

Downloading Images to a Computer

The following methods can be used to download images recorded by the camera to a computer. Some methods, depending on the OS used, may not be available. Please read *System Requirements* (p. 26) in advance.

■ Camera to Computer Connection

Supplied Software Install		all It	Do Not Install It	
Downloading Method		Computer Procedure	Camera Procedure	Computer Procedure
OS	Windows 98 SE	•	•	-
	Windows Me	•	•	-
	Windows 2000	•	•	-
	Windows XP	•	•	•
	Mac OS X	•	•	•
		+	↓	
Computer System Requirements		 Basic Guide (p. 2 Software Starter 	6) Guide	
		+	↓	—
Connecting the Camera to a Computer		• Basic Guide (p. 2	8)	• Windows [®] YP
		$\mathbf{+}$	↓ I	and Mac OS X
Downloading Images to a Computer		 Basic Guide (p. 2 Software Starter 	9, 30) Guide	Users leallet

■ Using a Memory Card Reader

A memory card reader can be used with all the operating systems listed above. See the *Software Starter Guide* for details.

System Requirements

Please install the software on a computer meeting the following minimum requirements.

Windows

OS	Windows 98 Second Edition (SE) Windows Me Windows 2000 Service Pack 4 Windows XP (including Service Pack 1 and Service Pack 2)	
Computer Model	The above OS should be pre-installed on computers with built-in USB ports.	
CPU	Pentium 500 MHz or higher processor	
RAM	Windows 98 SE/Windows Me Windows 2000/Windows XP	128 MB or more 256 MB or more
Interface	USB	
Free Hard Disk Space	Canon Utilities ZoomBrowser EX PhotoStitch Canon Camera TWAIN Driver Canon Camera WIA Driver	200 MB or more 40 MB or more 25 MB or more 25 MB or more
Display	1,024 x 768 pixels/High Color (16 bit) or better	

Macintosh

OS	Mac OS X (v10.2 – 10.4)	
Computer Model	The above OS should be pre-installed on computers with built-in USB ports.	
CPU	PowerPC G3/G4/G5 or Intel processor*	
RAM	256 MB or more	
Interface	USB	
Free Hard Disk Space	 Canon Utilities ImageBrowser PhotoStitch 	200 MB or more 40 MB or more
Display	1,024 x 768 pixels/32,000 Colors or better	

* EOS Utility (software for EOS DIGITAL series cameras) is only supported by PowerPC.

Preparing to Download Images

Ensure that you install the software first before connecting the camera to the computer.

Items to Prepare

- · Camera and computer
- · Canon Digital Camera Solution Disk supplied with the camera
- · Interface cable supplied with the camera

1. Install the software.

1. Place the Canon Digital Camera Solution Disk in the computer's CD-ROM drive.

Macintosh Double-click the [Canon Digital Camera Installer icon 🧐 in the CD-ROM window. When the installer panel appears, click [Install].



2. Click [Easy Installation].

Macintosh Select [Easy Installation] and click [Next].

Proceed with the installation while reviewing installation settings.

3. When the installation is complete, click either the [Finish] or [Restart] button that appears.



- Macintosh When the installation is finished. click [Exit].
- 4. Remove the Canon Digital Camera Solution Disk from the CD-ROM drive when your normal desktop screen appears.







2. Connecting the camera to a computer.

1. Use the supplied interface cable to connect the computer's USB port to the camera's DIGITAL terminal.

Slip your fingernail under the left end of the camera's terminal cover, lift it open and plug the interface cable in all the way.



Interface Cable

2. Set the camera mode switch to ▶ (playback) and turn on the power.

The camera and computer will be able to communicate.



Always grasp the sides of the connector when disconnecting the interface cable from the camera's DIGITAL terminal.

Windows

If the Digital Signature Not Found window appears, click [Yes]. The USB driver will automatically finish installing onto the computer when you attach the camera and open a connection.

Windows Downloading Images to a Computer

A window allowing you to set the preferences will appear when a connection is established between the camera and computer.

1. Select [Canon CameraWindow] and click [OK] (first time only).

If the window to the right does not appear, click the [Start] menu and select [All Programs] or [Programs], followed by [Canon Utilities], [CameraWindow] [PowerShot-IXY-IXUS-DV 6] and [CameraWindow].

Canon IXY DIGITAL XXXXXX ?X
Camera connected
Select the resource to invest for this action
Encon Connectivitedom Noveloads Images From Cancer Canera
Canon EOS Utility Doverloads images from EOS camera
Microsoft Scanner and Camera Wizard Download pictures from a camera or scanner
Always use this program for this action OK Cancel

2. Download the images.

- Download the images using the camera or the computer.
- By default, the downloaded images are saved into the [My Pictures] folder.



Thumbnails (small versions) of the downloaded images will display in the ZoomBrowser EX Main Window. By default, the downloaded images are saved into subfolders according to their shooting dates.



Macintosh Downloading Images to a Computer

The following window will appear when you establish a connection between the camera and computer. If it fails to appear, click the [Canon CameraWindow] icon on the Dock (the bar which appears at the bottom of the desktop).

1. Download the images.

- · Download the images using the camera or the computer.
- By default, the downloaded images are saved into the [Pictures] folder.



Thumbnails (small versions) of the downloaded images will display in the ImageBrowser Browser Window. By default, the downloaded images are saved into folders according to their shooting dates.



Downloading Images Using the Camera (Direct Transfer)

Use this method to download images using camera operations. Install the supplied software and adjust the computer settings before using this method for the first time (p. 27).

	All Images	Transfers and saves all images to the computer.	
	New ImagesTransfers and saves to the computer only the imate that have not been previously transferred.		
*	DPOF Trans. Images	Transfers and saves to the computer only the images with DPOF Transfer Order settings. (<i>Advanced Guide</i> p. 95).	
	Select & Transfer	Transfers and saves single images to the computer as you view and select them.	
	Wallpaper	Transfers and saves single images to the computer as you view and select them. The transferred images display on the computer desktop.	

1. Confirm that the Direct Transfer menu is displayed on the camera's LCD monitor.

- The $\square \sim$ button will light blue.
- Press the **MENU** button if the Direct Transfer menu fails to appear.



Direct Transfer Menu

■ All Images/New Images/DPOF Trans. Images

2. Select 🖬 , 🔚 or 💁 and press the ≙⊷ button.

- The images will download. The
 D_I
 w
 w
 button will blink blue while downloading is
 in progress. The display will return to the
 Direct Transfer menu when the download
 is complete.
- To cancel the download, press the FUNC./ SET button.



- 3. Select images to download and press the ⊡⊷ button (or the FUNC./SET button).
 - The images will download. The
 <u>□</u>
 <u>∞</u>
 button will blink blue while downloading is
 in progress.
 - Images can also be selected during index playback (*Advanced Guide* p. 79).
 - Press the **MENU** button to return to the Direct Transfer menu.



Only JPEG images can be downloaded as wallpaper for a computer. On the Windows platform, the files are automatically created as BMP images.



The option selected with the $\Box_{\mu} \swarrow$ button is retained even when the camera's power is turned off. The previous setting will be in effect the next time the Direct Transfer menu is displayed. The image selection screen will appear directly when the [Select & Transfer] or the [Wallpaper] option was last selected.



Safety Precautions

Be sure to read, understand and follow the safety precautions below when using the camera, in order to prevent injury, burns or electrical shock to yourself and others.

Be sure to also read the safety precautions listed in the Advanced Camera User Guide.

<u> W</u>arnings

- · Do not trigger the flash in close proximity to human or animal eyes.
- · Store this equipment out of the reach of children and infants.
- Avoid dropping or subjecting the camera to severe impacts. Do not touch the flash portion of the camera if it has been damaged.
- Stop operating the equipment immediately if it emits smoke or noxious fumes.
- · Do not handle the power cord if your hands are wet.
- Do not use batteries which are not specified for this camera.
- The compact power adapter output terminals have been designed exclusively for this equipment. Do not use them for other products.